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Pattern Analysis and Machine Intelligence, IEEE Transactions on , Volume: 25 , Issue: 12 , Dec. 2003

Pages:1505 - 1518

[\[Abstract\]](#)   [\[PDF Full-Text \(1091 KB\)\]](#)   IEEE JNL
**2 Face recognition by independent component analysis***Bartlett, M.S.; Movellan, J.R.; Sejnowski, T.J.;*

Neural Networks, IEEE Transactions on , Volume: 13 , Issue: 6 , Nov. 2002

Pages:1450 - 1464

[\[Abstract\]](#)   [\[PDF Full-Text \(1405 KB\)\]](#)   IEEE JNL
**3 Motion field histograms for robust modeling of facial expressions***Choudhury, T.; Pentland, A.;*

Pattern Recognition, 2000. Proceedings. 15th International Conference on , Volume: 2 , 3-7 Sept 2000

Pages:929 - 932 vol.2

[\[Abstract\]](#)   [\[PDF Full-Text \(380 KB\)\]](#)   IEEE CNF
**4 System identification in the presence of unmodeled dynamics-a principal components extraction approach***Yanghai Tsin; Yaotong Li;*

Decision and Control, 1996., Proceedings of the 35th IEEE , Volume: 3 , 11-11 Dec. 1996

Pages:2555 - 2556 vol.3

[\[Abstract\]](#) [\[PDF Full-Text \(172 KB\)\]](#) [IEEE CNF](#)

### 5 Visual servoing using eigenspace method and dynamic calculation of interaction matrices

*Deguchi, K.; Noguchi, T.;*

Pattern Recognition, 1996., Proceedings of the 13th International Conference on , Volume: 1 , 25-29 Aug. 1996

Pages:302 - 306 vol.1

[\[Abstract\]](#) [\[PDF Full-Text \(412 KB\)\]](#) [IEEE CNF](#)

### 6 Lipreading from color motion video

*Greg I. Chiou; Jenq-Neng Hwang;*

Acoustics, Speech, and Signal Processing, 1996. ICASSP-96. Conference

Proceedings., 1996 IEEE International Conference on , Volume: 4 , 7-10 May

Pages:2156 - 2159 vol. 4

[\[Abstract\]](#) [\[PDF Full-Text \(412 KB\)\]](#) [IEEE CNF](#)

### 7 Recognizing faces with expressions: within-class space and between class space

*Yu Bing; Chen Ping; Jin Lianfu;*

Pattern Recognition, 2002. Proceedings. 16th International Conference on , Volume: 1 , 11-15 Aug. 2002

Pages:139 - 142 vol.1

[\[Abstract\]](#) [\[PDF Full-Text \(336 KB\)\]](#) [IEEE CNF](#)

### 8 Motion-based recognition of people in EigenGait space

*BenAbdelkader, C.; Cutler, R.; Davis, L.;*

Automatic Face and Gesture Recognition, 2002. Proceedings. Fifth IEEE International Conference on , 20-21 May 2002

Pages:254 - 259

[\[Abstract\]](#) [\[PDF Full-Text \(290 KB\)\]](#) [IEEE CNF](#)

### 9 Principal component analysis for facial animation

*Goudeaux, K.; Tsuhan Chen; Shyue-Wu Wang; Jen-Duo Liu;*

Acoustics, Speech, and Signal Processing, 2001. Proceedings. (ICASSP '01). 2 IEEE International Conference on , Volume: 3 , 7-11 May 2001

Pages:1501 - 1504 vol.3

[\[Abstract\]](#) [\[PDF Full-Text \(364 KB\)\]](#) [IEEE CNF](#)

### 10 Face detection and recognition using PCA

*Sang-Jean Lee; Sang-Bong Jung; Jang-Woo Kwon; Seung-Hong Hong;*

TENCON 99. Proceedings of the IEEE Region 10 Conference , Volume: 1 , 15-18 Sept. 1999

Pages:84 - 87 vol.1

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*Hosmer, P.;*

Aerospace and Electronic Systems Magazine, IEEE , Volume: 19 , Issue: 8 , A  
2004

Pages:13 - 17

[\[Abstract\]](#)   [\[PDF Full-Text \(465 KB\)\]](#)   **IEEE JNL**

## 2 Accurate motion detection and sawtooth artifacts remove video processing engine for LCD TV

Chao-Chee Ku; Ren-Kuan Liang;

Consumer Electronics, IEEE Transactions on , Volume: 50 , Issue: 4 , Nov. 20  
Pages:1194 - 1201

[\[Abstract\]](#) [\[PDF Full-Text \(906 KB\)\]](#) **IEEE JNL**

### 3 Pedestrian Detection Using Stereo Night Vision

*Liu, X.; Fujimura, K.;*

Vehicular Technology, IEEE Transactions on , Volume: 53 , Issue: 6 , Nov. 2006  
Pages:1657 - 1665

[\[Abstract\]](#)   [\[PDF Full-Text \(1584 KB\)\]](#)   **IEEE JNL**

#### 4 MDR for law enforcement [motion detector radar]

*Frazier, L.M.;*

Potentials, IEEE , Volume: 16 , Issue: 5 , Dec. 1997-Jan. 1998

Pages:23 - 26

[\[Abstract\]](#)   [\[PDF Full-Text \(684 KB\)\]](#)   **IEEE JNL**

**5 Camcorders***Miller, M.C.;*

Potentials, IEEE , Volume: 11 , Issue: 3 , Oct. 1992

Pages:40 - 43

[\[Abstract\]](#) [\[PDF Full-Text \(472 KB\)\]](#) IEEE JNL**6 A real-time field-sequential stereoscopic image converter***Chul-Ho Choi; Byong-Heon Kwon; Myung-Ryul Choi;*

Consumer Electronics, IEEE Transactions on , Volume: 50 , Issue: 3 , Aug. 20

Pages:903 - 910

[\[Abstract\]](#) [\[PDF Full-Text \(840 KB\)\]](#) IEEE JNL**7 Digital zoom camera with image sharpening and suppression***Weerasinghe, C.; Nilsson, M.; Lichman, S.; Kharitonenko, I.;*

Consumer Electronics, IEEE Transactions on , Volume: 50 , Issue: 3 , Aug. 20

Pages:777 - 786

[\[Abstract\]](#) [\[PDF Full-Text \(1149 KB\)\]](#) IEEE JNL**8 Measurement of superconductor motion in R&D coil for supercooling the LHD helical coil***Nishimura, A.; Mito, T.; Yamada, S.; Imagawa, S.; Takahata, K.; Yanagi, N.; Chikaraishi, H.; Tamura, H.; Iwamoto, A.; Hamaguchi, S.; Hishinuma, Y.; Nyl. A.;*

Applied Superconductivity, IEEE Transactions on , Volume: 14 , Issue: 2 , Jun 2004

Pages:1515 - 1518

[\[Abstract\]](#) [\[PDF Full-Text \(216 KB\)\]](#) IEEE JNL**9 Robust joint audio-video localization in video conferencing using reliability information***Lo, D.; Goubran, R.A.; Dansereau, R.M.; Thompson, G.; Schulz, D.;*

Instrumentation and Measurement, IEEE Transactions on , Volume: 53 , Issue 4 , Aug. 2004

Pages:1132 - 1139

[\[Abstract\]](#) [\[PDF Full-Text \(440 KB\)\]](#) IEEE JNL**10 A survey on visual surveillance of object motion and behaviors***Weiming Hu; Tieniu Tan; Liang Wang; Maybank, S.;*

Systems, Man and Cybernetics, Part C, IEEE Transactions on , Volume: 34 , Issue 3 , Aug. 2004

Pages:334 - 352

[\[Abstract\]](#) [\[PDF Full-Text \(320 KB\)\]](#) IEEE JNL**11 Hybrid parallel-slant hole collimators for SPECT imaging***Chuanyong Bai; Ling Shao; Jinghan Ye; Durbin, M.; Petrillo, M.;*

Nuclear Science, IEEE Transactions on , Volume: 51 , Issue: 3 , June 2004

Pages:619 - 624

[\[Abstract\]](#) [\[PDF Full-Text \(232 KB\)\]](#) [IEEE JNL](#)

### 12 **Neuromorphic vision chips**

*Koch, C.; Mathur, B.;*

Spectrum, IEEE , Volume: 33 , Issue: 5 , May 1996

Pages:38 - 46

[\[Abstract\]](#) [\[PDF Full-Text \(2684 KB\)\]](#) [IEEE JNL](#)

### 13 **The computational eye**

*Werblin, F.; Jacobs, A.; Teeters, J.;*

Spectrum, IEEE , Volume: 33 , Issue: 5 , May 1996

Pages:30 - 37

[\[Abstract\]](#) [\[PDF Full-Text \(4124 KB\)\]](#) [IEEE JNL](#)

### 14 **Gulf legacy: from factory floor to desert war**

*Zorpette, G.;*

Spectrum, IEEE , Volume: 28 , Issue: 9 , Sept. 1991

Pages:40 - 42

[\[Abstract\]](#) [\[PDF Full-Text \(524 KB\)\]](#) [IEEE JNL](#)

### 15 **Low bit-rate video compression with neural networks and temporal subsampling**

*Cramer, C.; Gelenbe, E.; Bakircioglu, H.;*

Proceedings of the IEEE , Volume: 84 , Issue: 10 , Oct. 1996

Pages:1529 - 1543

[\[Abstract\]](#) [\[PDF Full-Text \(2832 KB\)\]](#) [IEEE JNL](#)

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# 1 [Technical session 11: video processing: Segmentation and recognition of multi-attribute motion sequences](#)

Chuanjun Li, Peng Zhai, Si-Qing Zheng, Balakrishnan Prabhakaran

October 2004 **Proceedings of the 12th annual ACM international conference on Multimedia**Full text available: [pdf\(244.82 KB\)](#) Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

In this work, we focus on fast and efficient recognition of motions in multi-attribute continuous motion sequences. 3D motion capture data, animation motion data, and sensor data from gesture sensing devices are examples of multi-attribute continuous motion sequences. These sequences have multiple attributes rather than only one attribute as time series data has. Motions can have different rates and durations, and the resulting data can thus have different lengths. Also, motion data can have ...

**Keywords:** gesture, multi-attribute motion, pattern recognition, segmentation, singular value decomposition

# 2 [Sequential thematic organization of publications: how to achieve coherence in proposals and reports](#)

J. R. Tracey, D. E. Rugh, W. S. Starkey

August 1999 **ACM SIGDOC Asterisk Journal of Computer Documentation**, Volume 23 Issue 3Full text available: [pdf\(3.80 MB\)](#) Additional Information: [full citation](#), [index terms](#)

# 3 [Video Rewrite: driving visual speech with audio](#)

Christoph Bregler, Michele Covell, Malcolm Slaney

August 1997 **Proceedings of the 24th annual conference on Computer graphics and interactive techniques**Full text available: [pdf\(179.44 KB\)](#) Additional Information: [full citation](#), [references](#), [citations](#), [index terms](#)

**Keywords:** facial animation, lip sync

# 4 [Interactive Editing Systems: Part II](#)



Norman Meyrowitz, Andries van Dam

September 1982 **ACM Computing Surveys (CSUR)**, Volume 14 Issue 3

Full text available:  [pdf\(9.17 MB\)](#)

Additional Information: [full citation](#), [references](#), [citations](#), [index terms](#)



##### 5 Face recognition: A literature survey

W. Zhao, R. Chellappa, P. J. Phillips, A. Rosenfeld

December 2003 **ACM Computing Surveys (CSUR)**, Volume 35 Issue 4

Full text available:  [pdf\(4.28 MB\)](#)

Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)



As one of the most successful applications of image analysis and understanding, face recognition has recently received significant attention, especially during the past several years. At least two reasons account for this trend: the first is the wide range of commercial and law enforcement applications, and the second is the availability of feasible technologies after 30 years of research. Even though current machine recognition systems have reached a certain level of maturity, their success is ...

**Keywords:** Face recognition, person identification

##### 6 Designing a universal keyboard using chording gloves

Seongil Lee, Sang Hyuk Hong, Jae Wook Jeon

June 2002 **ACM SIGCAPH Computers and the Physically Handicapped , Proceedings of the 2003 conference on Universal usability**, Issue 73-74

Full text available:  [pdf\(544.77 KB\)](#)

Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)



A universal input device for both text and Braille input was developed in a Glove-typed interface using all the joints of the four fingers and thumbs of both hands. The glove-typed device works as of now for input of Korean characters, numbers, and Braille characters using mode conversion. Considering the finger force and the fatigue from repeated finger motions, the input switch was made of conductible silicon ink, which is easy to apply to any type of surface, light, and enduring. The usability ...

**Keywords:** chording gloves, device-independence, keyboard, keymap, universal access, usability

##### 7 Transfinite nesting in array-theoretic figures, changes, rigs, and arms. Part I

Trenchard More

September 1993 **ACM SIGAPL APL Quote Quad , Proceedings of the international conference on APL**, Volume 24 Issue 1

Full text available:  [pdf\(1.95 MB\)](#)

Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)



Nesting and stemming (infinite successive singling) of arrays of nestings and stemmings result in forms. Forms of 0th-, 1st-, 2nd-, or 3rd-order, array-theoretic, totally defined functions are again such functions, called, respectively, figures, changes, rigs, and arms. One arms a rig before rigging a change before changing a figure. Part I lays the foundation for a new approach to a theory of arrays. This Part considers the analogy between array-theoretic and Euclidean figures, analyzes form se ...

**Keywords:** APL2, Nial, array theory, formal systems, function arrays, nested arrays

##### 8 Visual communication: An invitation to discuss computer depiction

Frédo Durand

June 2002



### Proceedings of the 2nd international symposium on Non-photorealistic animation and rendering

Full text available:  [pdf\(401.53 KB\)](#) Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#)

This paper draws from art history and perception to place computer depiction in the broader context of picture production. It highlights the often underestimated complexity of the interactions between features in the picture and features of the represented scene.


Depiction is not always a unidirectional projection from a 3D scene to a 2D picture, but involves much feedback and influence from the picture space to the object space. Depiction can be seen as a pre-existing 3D reality projected onto ...

**Keywords:** computer depiction, interaction, non-photorealistic rendering, perception, visual arts

#### 9 Machine interpretation of CAD data for manufacturing applications

Qiang Ji, Michael M. Marefat

September 1997 **ACM Computing Surveys (CSUR)**, Volume 29 Issue 3

Full text available:  [pdf\(1.90 MB\)](#) Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#), [review](#)

Machine interpretation of the shape of a component for CAD databases is an important problem in CAD/CAM, computer vision, and intelligent manufacturing. It can be used in CAD/CAM for evaluation of designs, in computer vision for machine recognition and machine inspection of objects, and in intelligent manufacturing for automating and integrating the link between design and manufacturing. This topic has been an active area of research since the late '70s, and a significant number of computat ...

**Keywords:** artificial intelligence, automated process planning, computer-aided design, computer-integrated manufacturing, feature recognition, flexible automation

#### 10 An alternative conception of tree-adjoining derivation

Yves Schabes, Stuart M. Shieber

June 1992 **Proceedings of the 30th conference on Association for Computational Linguistics**

Full text available:  [pdf\(823.95 KB\)](#) Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#)  
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The precise formulation of derivation for tree-adjoining grammars has important ramifications for a wide variety of uses of the formalism, from syntactic analysis to semantic interpretation and statistical language modeling. We argue that the definition of tree-adjoining derivation must be reformulated in order to manifest the proper linguistic dependencies in derivations. The particular proposal is both precisely characterizable, through a compilation to linear indexed grammars, and computation ...

#### 11 Conversations with Clement Mok and Jakob Nielsen, and with Bill Buxton and Clifford Nass

Richard I. Anderson

January 2000 **interactions**, Volume 7 Issue 1

Full text available:  [pdf\(986.68 KB\)](#) Additional Information: [full citation](#), [citations](#), [index terms](#)

#### 12 Informatics: input and output: An assignment of key-codes for a Japanese character

keyboard

Yuzuru Hiraga, Yoshihiko Ono, Yamada-Hisao

September 1980 **Proceedings of the 8th conference on Computational linguistics**Full text available:  [pdf\(798.47 KB\)](#) Additional Information: [full citation](#), [references](#)**13** Section 02: perspectives: From user to character: an investigation into user-descriptions in scenarios


Lene Nielsen

June 2002 **Proceedings of the conference on Designing interactive systems: processes, practices, methods, and techniques**Full text available:  [pdf\(565.29 KB\)](#) Additional Information: [full citation](#), [references](#), [citations](#), [index terms](#)**14** Computational geometry: a retrospective

Bernard Chazelle

May 1994 **Proceedings of the twenty-sixth annual ACM symposium on Theory of computing**Full text available:  [pdf\(2.20 MB\)](#) Additional Information: [full citation](#), [references](#), [citations](#), [index terms](#)**15** On automated message processing in electronic commerce and work support systems: speech act theory and expressive felicity

Steven O. Kimbrough, Scott A. Moore

October 1997 **ACM Transactions on Information Systems (TOIS)**, Volume 15 Issue 4Full text available:  [pdf\(502.20 KB\)](#) Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#)

Electronic messaging, whether in an office environment or for electronic commerce, is normally carried out in natural language, even when supported by information systems. For a variety of reasons, it would be useful if electronic messaging systems could have semantic access to, that is, access to the meanings and contents of, the messages they process. Given that natural language understanding is not a practicable alternative, there remain three approaches to delivering systems with semant ...

**Keywords:** electronic commerce, formal language for business communication, speech act theory

**16** Interacting through different modalities: Multimodal communication between synthetic agents

Catherine Pelachaud, Isabella Poggi

May 1998 **Proceedings of the working conference on Advanced visual interfaces**Full text available:  [pdf\(1.31 MB\)](#) Additional Information: [full citation](#), [abstract](#), [references](#)

Dialoging with a synthetic agent is a vast research topic to enhance user-interface friendliness. We present in this paper an on-going project on the simulation of a dialog situation between two synthetic agents. More particularly we focus our interest on finding the appropriate facial expressions of a speaker addressing to different types of listeners (tourist, employee, child, and so on) using various linguistic forms such as request, question, information. Communication between speaker and li ...

**Keywords:** 3D synthetic agents, facial expression, speech acts, visual modality

**17 Illustrative risks to the public in the use of computer systems and related technology**

Peter G. Neumann

January 1996 **ACM SIGSOFT Software Engineering Notes**, Volume 21 Issue 1Full text available:  [pdf\(2.54 MB\)](#) Additional Information: [full citation](#)**18 Gestures: SHARK<sup>2</sup>: a large vocabulary shorthand writing system for pen-based computers**

Per-Ola Kristensson, Shumin Zhai

October 2004 **Proceedings of the 17th annual ACM symposium on User interface software and technology**Full text available:  [pdf\(321.66 KB\)](#) Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

Zhai and Kristensson (2003) presented a method of speed-writing for pen-based computing which utilizes gesturing on a stylus keyboard for familiar words and tapping for others. In SHARK<sup>2</sup>, we eliminated the necessity to alternate between the two modes of writing, allowing any word in a large vocabulary (e.g. 10,000-20,000 words) to be entered as a shorthand gesture. This new paradigm supports a gradual and seamless transition from visually guided tracing to recall-based ges ...

**Keywords:** gesture recognition, shorthand, shorthand recognition, stenography, text input

**19 Embodiment in conversational interfaces: Rea**

J. Cassell, T. Bickmore, M. Billingham, L. Campbell, K. Chang, H. Vilhjálmsson, H. Yan

May 1999 **Proceedings of the SIGCHI conference on Human factors in computing systems: the CHI is the limit**Full text available:  [pdf\(1.12 MB\)](#) Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#)

In this paper, we argue for embodied conversational characters as the logical extension of the metaphor of human - computer interaction as a conversation. We argue that the only way to fully model the richness of human I&+ to-face communication is to rely on conversational analysis that describes sets of conversational behaviors as fulfilling conversational functions, both interactional and propositional. We demonstrate how to implement this approach in Rea, an embodied conversa ...

**Keywords:** conversational characters, intelligent agents, multimodal input, multimodal output

**20 Form and Content in Computer Science (1970 ACM turing lecture)**

Marvin Minsky

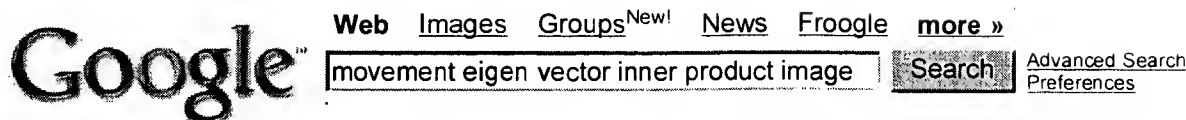
April 1970 **Journal of the ACM (JACM)**, Volume 17 Issue 2Full text available:  [pdf\(1.34 MB\)](#) Additional Information: [full citation](#), [references](#), [citations](#), [index terms](#)

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**movement**' is produced, the **image** ...  $y = y(i)$  the **vector** of the nonregular samples ...[vision.arc.nasa.gov/personnel/al/papers/92osa/lrn.html](http://vision.arc.nasa.gov/personnel/al/papers/92osa/lrn.html) - 20k - [Cached](#) - [Similar pages](#)**[DOC] Quinsigamond Community College**File Format: Microsoft Word 2000 - [View as HTML](#)... equations, diagonalization, complex **eigen** values, numerical ... matrix of linear  
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... is remotely controlled by the user's head **movement**. ... This **vector** is transferred to the remote site where the **image** is reconstructed using the **eigen**- space sent ...

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... 6 Definition. Given a set of **vectors**  $x$  ... Let  $A$  be a square  $n \times n$  matrix. A nonzero **vector**  $x$  ...  $Ax = \lambda x$  is called an **eigenvector** and  $\lambda$  is called an **eigenvalue**. ...

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... Ordinary hessian\_normal permits lateral **movement** of such triple ... **vector** is computed as the **eigenvector** of the ... gradient parallel to the mean curvature **vector**. ...

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... between-class variance and minimise the within-class variance of **vectors**  $f_i$  ... By **eigen**-decomposing matrix  $A$ ; we obtain the coefficient **vector**  $a$ : Therefore ...

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... **Movement** of the camera is constrained to a 2D plane ... Eliminating the  $k$ th basis **vector** will induce an error on ... average energy of this error is the **eigen**- value  $l$  ...

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... **Movement** along each **vector** set or **image**'s manifold can be ... We can view the unusual **vector** set representation as a ... In the bag of pixel **vectors**, ordering of the ...

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### Face recognition with pose and illumination variations using new ...

... during which there is basically no head subject **movement**. ... the performance of the two support-**vector** machines does ... were used to construct the **eigen**-light-fields ...

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... orien- tation of this characteristic **vector** but also ... band orientation, the accompanying **eigenvector** predicts the ... It is possible that grain **movement** by sliding ...

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**Pellionisz (1985) Tensor Network Theory of the Metaorganization of ...**

... muscle produce a burst of spikes of unitary strength which results in a **movement** of the hand ... Once the first **eigenvector** and corresponding **eigenvalue** is ...  
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... be done sep- arately for each **eigenvector** component, and ...  $T x^n x$  is the resolute **vector**, the equation ... tion techniques the sense of **movement** and changing ...  
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... the bounding box of its **motion** blob in ... We compute the **principal components** [22] of the space ... by  $\times \frac{1}{4} \frac{1}{2} \times \frac{1}{4} \text{ \AA}$  by computing the **eigen-** value decomposition ...

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... sponding to the person's **motion** blob in ... very much analogous to the '**Eigen-** face' approach ... Specifically, we apply **principal components** analysis (PCA) to ...

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... known approaches for face **recognition**, **Principal Component** Analysis (PCA ... giving more weight to **components** corresponding to ... Torres, "A global **eigen** approach for ...

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... was also completed prior to the **principal components** analysis on ... Some advantages of **eigen**-points for estimating ... Spanning the gap between **motion** estimation and ...

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... Standard PCA (**principal component** analysis) techniques [1] are ... recognizing speech using **eigen** sequences", MBR97 ... local parametrized models of **image motion**", Int. ...

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... bias estimator and the scaled **principal components** performs better than the original **Eigen image** classifier. ... The **motion** estimation step then attempts to ...

[www.ece.umn.edu/users/kjhan/publications/kjhan-papers/icip96\\_0915.pdf](http://www.ece.umn.edu/users/kjhan/publications/kjhan-papers/icip96_0915.pdf) - [Similar pages](#)

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ABSTRACT: Since **Principal Component** Analysis (PCA) technique has ... vision researches have used **eigen**-whatever techniques to ... dynamics of the **motion** and appearance ...

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... algorithms perform **recognition** from **image** sequences, using ... of identity and **motion** is modelled ... angles between corresponding **principal component** analysis

(PCA ...

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### Gait Recognition

... be learned from spatial-temporal **motion** pattern of ... analysis method to obtain an **eigen-shape** as ... gait **recognition** method using PCA ( **Principal Component** Analysis ...  
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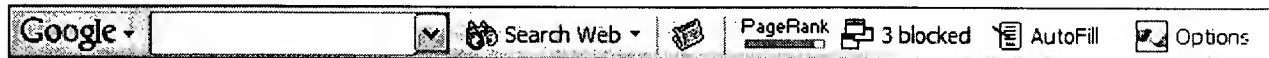
... Neural Networks and Self Organizing Maps (SOMs). **Principal Component** Analysis (PCA). ... **Eigen** Space and **Eigen** Faces. ... Future Work. Face Detection in **motion** pictures. ...

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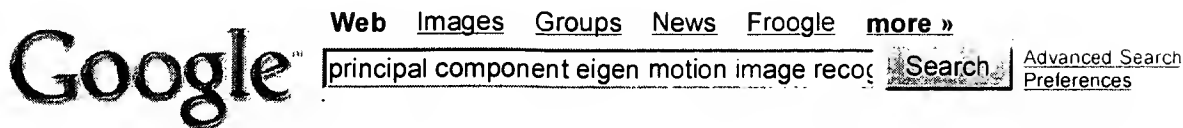


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Figure 1: Examples of **image** morphs using ... were estimated automatically by **eigen-points**. ...

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... Translate & Time Scale **Eigen** Matching 1 c ... by an a ne transformation in their 2D **motion** projections. ... each column of A in terms of **principal component** directions ...

[www.wisdom.weizmann.ac.il/~moshe/CompVis2000/Papers/eigenCurveCVIU.pdf](http://www.wisdom.weizmann.ac.il/~moshe/CompVis2000/Papers/eigenCurveCVIU.pdf) -

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... Face Detection. Colour. **Motion**. Template. ... **Images** are high dimensional correlated data. **Principal Component** Analysis. **Eigen** decomposition. Singular Value Decomposition ...

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... extract 21 features representing dancing **motion** and apply ... 7 **eigen** vectors having large **eigen** values and ... learned to map the **principal components** to predefined ...

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... to form a spatial-temporal **motion** energy model ... Loeve trans- formation, also called **principal component** analysis (PCA ... model the light in high order **eigen**- vectors ...

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... touched, while the negative **components** of x become zero ... light sources at in- nity, then the **image** is given by the superposition of the **images** which would ...

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... employed here is entirely dierent from **Principal Component** Analysis (PCA ... cd)

**Eigen**- normalized canonical **images** F1(X1 Y1) and F2 ... 3 Ane Transform and 3D

**Motion** ...

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... Parameterized Models of **Image Motion**, International Journal ... Diamantaras , SY Kung.

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